

Communicable Diseases in the Americas

Yellow fever, malaria, and smallpox, although marked for extinction, remain major unconquered communicable diseases of the Americas. The Pan American Sanitary Bureau, regional office of the World Health Organization (PASB/WHO), has recently provided a progress report on eradication of communicable diseases in the Western Hemisphere.

Yellow fever and dengue. In 1947, the *Aedes aegypti* mosquito, carrier of urban yellow fever and dengue fever, was marked for eradication.

Since then, the mosquito has been eradicated in 14 countries and 3 territories in the Americas—Argentina, Bermuda, Bolivia, Brazil, British Honduras, the Canal Zone, Chile, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay. Areas still infected include parts of nine southeastern U.S. States.

So long as the *A. aegypti* exists, no area clear of the mosquito is safe from the risk of reinfection, Dr. Abraham Horwitz, director of PASB, pointed out. El Salvador was reinfested in 1965, after being free from the mosquito since 1957. Mexico was also reinfested in 1965. In Mexico, reinfestation was mild, and the country is today free of the mosquito after a \$100,000 crash campaign. Mexico is spending \$1.4 million in 1967 to make sure it stays free. Colombia has been reinfested repeatedly.

The reinfestation of El Salvador has been traced to imported old tires, a good breeding ground for *A. aegypti* and a shelter for the eggs. A high-ranking public health official of El Salvador reported "strong suspicion that *A. aegypti* were brought into the country in used tires purchased in the United States by Salvadoran businessmen." So heavily reinfested is El Salvador now that only 59 of 2,243 localities in the country are considered free of this mosquito. Only 44,000 people in a population of 3 million live in cleared areas.

Since El Salvador had no budgeted funds for a new onslaught against the mosquito, counter-measures were initially financed out of funds from the national malaria campaign,

along with a U.S. contribution in 1965 of \$60,000. The late Dr. Thomas Pineda Martinez, Director General of Health, estimated that \$1.1 million would be needed over 3 years to eradicate the mosquito from the capital city alone. The country budgeted \$60,000 for control in 1966. There are no plans as yet for a new eradication program "since the financial resources are not available."

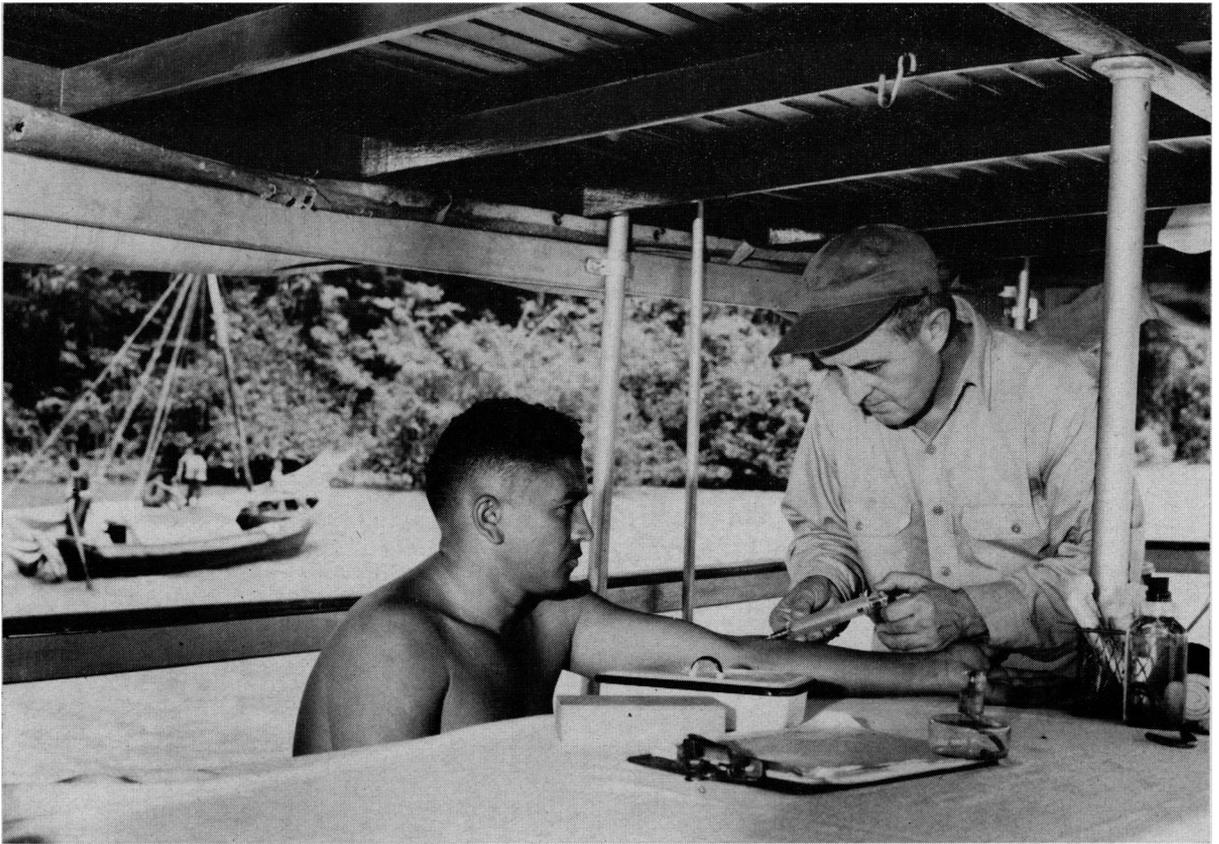
Jamaica, Puerto Rico, and Venezuela are among the countries that have been swept by outbreaks of dengue fever; more than 100,000 cases are known to have occurred in these countries. This disease usually incapacitates its victims for several days; its existence impedes tourism.

Experts estimate that it would cost \$80 million to rid the hemisphere of *A. aegypti* (not including the sum needed for the U.S. program).

Malaria. At the start of a concerted hemispherewide drive in 1956 to eradicate malaria, approximately 88 million persons were estimated to be exposed to the risk of that disease. Despite an increase in population to 104 million, some 54 million people in the Americas were living in areas free of risk by the end of 1965. If programs are carried through as planned, the remaining 50 million persons may justifiably anticipate similar benefits, PASB officials reported.

Between 1956 and 1965, a total of \$337,295,500 was invested in malaria eradication in the Americas—73.3 percent provided by governments and 26.7 percent by international agencies. The per capita cost per person protected was 29 cents. Deaths from malaria in the Western Hemisphere fell from 43,368 in 1952 to 2,285 in 1964.

The overriding need is for neighboring countries to carry out malaria eradication simultaneously, PASB officials emphasized. Formidable problems, however, are the rough topography of the malarious areas, hostile attitudes of some primitive populations, resistance of mosquitoes to certain chlorinated in-



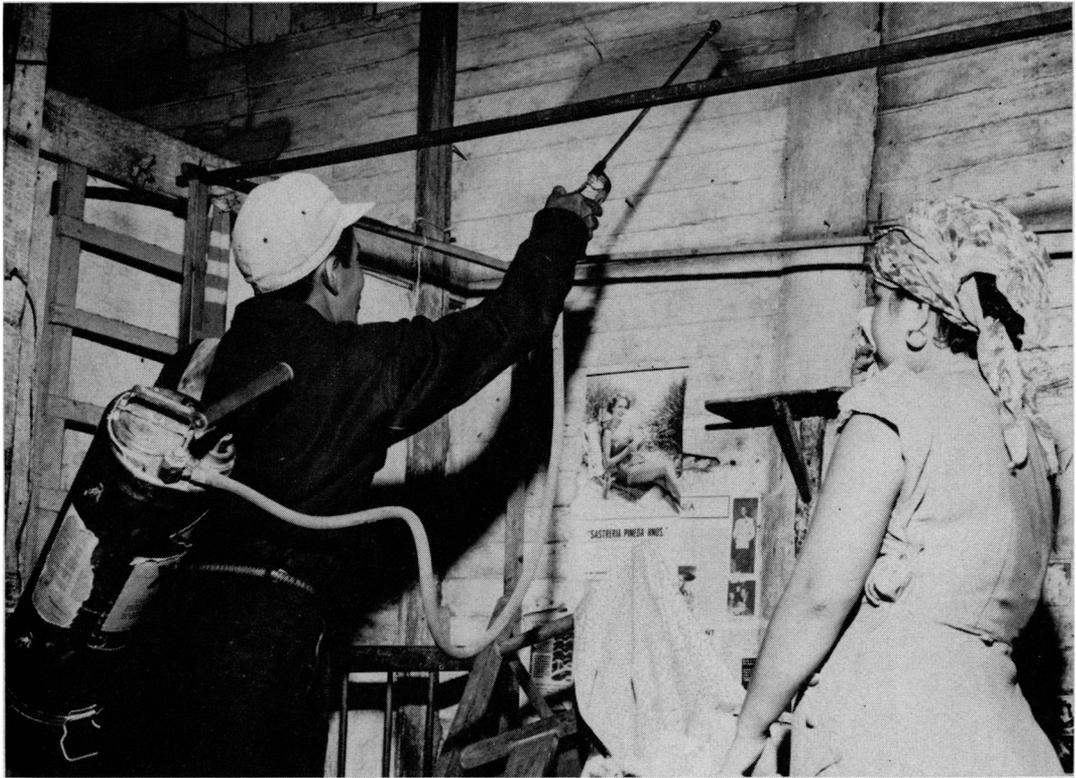
Dr. Causey, director of the Belém Virus Laboratory of Brazil, takes a blood specimen from a man with fever. The men are on a launch, presented to the Brazilian Government by the United States, which travels the Amazon Region rivers to distribute table salt treated with an antimalaria drug.

WHO photograph by Maxine Rude

A child in Bogota, Colombia, is vaccinated for smallpox by a public health department nurse. The Pan American Sanitary Bureau has helped Colombia, Ecuador, Peru, and Uruguay wage smallpox vaccination campaigns.

WHO photograph by Homer Page





Spraying in a malarious area of the State of Tabasco, Mexico, to control insects.—WHO photograph

secticides, and outdoor transmission of the disease, as well as administrative and financial difficulties. "If national eradication campaigns can prevent new infections for 3 consecutive years," said Dr. Horwitz, "malaria will by itself die out. When this goal is accomplished on a global scale, malaria's ancient curse will be lifted forever from the human race."

Smallpox. Smallpox is much simpler to wipe out than malaria because a vaccine is available to protect people. From 1921 to 1965 reported smallpox cases in the Western Hemisphere declined from 125,000 to about 1,500. Almost all cases are now concentrated in five countries. Brazil accounted for 92 percent of the reported cases from 1961 through 1965. A recent study by the inter-American health agency has shown that it will take only \$16 million and up to 5 years to rid the hemisphere of smallpox.

Tuberculosis. Like smallpox and malaria, tuberculosis has declined significantly in incidence in the last 20 years; death rates in the Americas have decreased by 13 percent. The decline has been slower, however, in the past few years. In

1965, the tuberculosis rate was about 23 per 100,000 in Middle America and 30 per 100,000 in South America. By comparison, the rate was only 4.3 in the United States and 3.5 in Canada.

Some public health officials have described the attitude of many nations, including that of the United States, as one bordering on apathy toward tuberculosis—an attitude based on the mistaken belief that it does not represent a major threat to health. Efforts are being made to alert such nations to the need for identifying, treating, and eliminating the relatively few remaining cases in their areas.

Other diseases. Diarrheal diseases are among the leading causes of death in 15 of the 20 Latin American countries, children under 5 years of age being most susceptible. To a great extent, diarrhea and many of the other enteric diseases reflect unsanitary conditions and the general slow pace of economic development in the Americas. Increasing numbers of the citizens need water supplies, commented PASB officials. Health and economic development must go hand in hand, each strengthening the other.